

Patent Claims

1. An antimicrobial, water-insoluble silicate glass powder, wherein the starting glass comprises

SiO ₂	30 - 70 wt.%
NaO ₂	0 - 1 wt.%
K ₂ O	0 - 1 wt.%
MgO	5 - 40 wt.%
CaO	0 - 40 wt.%
SrO	0 - 40 wt.%
BaO	0 - 40 wt.%
Al ₂ O ₃	0 - 25 wt.%
P ₂ O ₅	0 - 20 wt.%
B ₂ O ₃	0 - 20 wt.%,

characterized in that the sum of the alkali oxide contents is less than 1.5 wt.% in the total composition of the starting glass and the starting glass further contains, as biocidally active components, ions or atoms of the elements Ag, Zn, Cu, Ce, Te, or I with total proportions of < 2.5 wt.%.

2. An antimicrobial, water-insoluble silicate glass,
characterized in that

the biocidally active components comprise one or more of the following components:

Ag₂O, CuO, Cu₂O, TeO₂, ZnO, CeO₂, I,

wherein the sum of these components is greater than 0.1 wt.%, but less than 2.5 wt.%.

3. The antimicrobial, water-insoluble silicate glass powder according to claim 1,
further characterized in that
the size of the glass particles is $\leq 100 \mu\text{m}$.